

Amendments to the Claims:

Kindly amend claims 4, 10, 12, 13, and 22, as shown below.

This listing of claims will replace all prior versions and listings of claims in the Application:

Claim 1 (original): A data transmitter characterized by comprising:

a plurality of integrated circuits each having at least one input/output circuit; and

a transmission line which connects to the input/output circuits of said integrated circuits and has an element that changes an effective reactance per unit length depending on at least one of a signal voltage and a signal current.

Claim 2 (original): A data transmitter according to claim 1, characterized in that said transmission line is formed at least in or on a printed circuit board.

Claim 3 (original): A data transmitter according to claim 1, characterized in that said integrated circuits and said transmission line are formed on a single printed wiring board.

Claim 4 (currently amended): A data transmitter according to claim 1, characterized in that said transmission line comprises a grounded ground conductor, a signal conductor which receives [[a]] said signal voltage between the ground conductor and the signal conductor, and an insulating material which contains the element and insulates the signal conductor and the ground conductor from each other.

Claim 5 (original): A data transmitter according to claim 4, characterized in that the element includes one of a dielectric and a magnetic substance.

Claim 6 (original): A data transmitter according to claim 5, characterized in that the dielectric exhibits a nonlinear relationship between an electric field and dielectric polarization generated in the dielectric.

Claim 7 (original): A data transmitter according to claim 6, characterized in that the dielectric is at least one of lead zirconate titanate, bismuth strontium tantalate, ferroelectric, and liquid crystal.

Claim 8 (original): A data transmitter according to claim 5, characterized in that the magnetic substance exhibits a nonlinear relationship between a magnetic field and magnetization generated in the magnetic substance.

Claim 9 (original): A data transmitter according to claim 8, characterized in that the magnetic substance is at least one of NiZn ferrite and sendust.

Claim 10 (currently amended): A data transmitter according to claim 4, characterized in that the ground conductor forms a plurality of parallel-arrayed closed conduits, the insulating material fills each said closed conduit, and the signal conductor is arranged in each said insulating material.

Claim 11 (original): A data transmitter according to claim 1, characterized in that a maximum value of a change component in the effective reactance per unit length that changes depending on at least one of the signal voltage and the signal current in said transmission line is not smaller than a value of a fixed component independent of the signal voltage and the signal current.

Claim 12 (currently amended): A data transmission line characterized by comprising:
said data transmission line connecting the input/output circuits of a plurality of integrated circuits; and,

further comprising an element which changes an effective reactance per unit length depending on at least one of a signal voltage and a signal current.

HAYES SOLOWAY P.C.
3450 E. SUNRISE DRIVE,
SUITE 140
TUCSON, AZ 85718
TEL. 520.882.7623
FAX. 520.882.7643

175 CANAL STREET
MANCHESTER, NH 03101
TEL. 603.668.1400
FAX. 603.668.8567

Claim 13 (currently amended): A data transmission line according to claim 12, characterized by comprising:

a grounded ground conductor;

a signal conductor which receives [[a]] said signal voltage between said ground conductor and said signal conductor; and

an insulating material which contains the element and insulates said signal conductor and said ground conductor from each other.

Claim 14 (original): A data transmission line according to claim 13, characterized in that the element includes one of a dielectric and a magnetic substance.

Claim 15 (original): A data transmission line according to claim 14, characterized in that the dielectric exhibits a nonlinear relationship between an electric field and dielectric polarization generated in the dielectric.

Claim 16 (original): A data transmission line according to claim 15 , characterized in that the dielectric is at least one of lead zirconate titanate, bismuth strontium tantalate, ferroelectric, and liquid crystal.

Claim 17 (original): A data transmission line according to claim 14, characterized in that the magnetic substance exhibits a nonlinear relationship between a magnetic field and magnetization generated in the magnetic substance.

Claim 18 (original): A data transmission line according to claim 17, characterized in that the magnetic substance is at least one of NiZn ferrite and sendust.

Claim 19 (original): A data transmission line according to claim 13, characterized in that said ground conductor is formed at least in or on a printed wiring board, said insulating material is

arranged in the printed wiring board, and *said* signal conduct or is arranged in said insulting material.

Claim 20 (original): A data transmission line according to claim 13, characterized in that said ground conductor and said signal conductor are formed apart from each other on a printed wiring board, and said insulating material is arranged between said ground conductor and said signal conductor on the printed wiring board and joined to said ground conductor and said signal conductor.

Claim 21 (original): A data transmission line according to claim 12, characterized in that a plurality of data transmission lines are parallel-arrayed.

Claim 22 (currently amended): A data transmission line according to claim 13, characterized in that said ground conductor forms a plurality of parallel-arrayed closed conduits, said insulating material fills each said closed conduit , and said signal conductor is arranged in each said insulating material.

Claim 23 (original): A data transmission line according to claim 12, characterized in that a maximum value of a change component in the effective reactance per unit length that changes depending on at least one of the signal voltage and the signal current is not smaller than a value of a fixed component independent of the signal voltage and the signal current.

Claim 24 (original): A data transmission method characterized by comprising the steps of:

preparing a transmission line whose effective reactance per unit length changes depending on at least one of a signal voltage and a signal current; and
transmitting a signal between a plurality of integrated circuits via the transmission line.

Claim 25 (original): A data transmission method according to claim 24, characterized in that the transmitting step comprises the step of generating a nonlinear wave corresponding to the signal in the transmission line.

HAYES SOLOWAY P.C.
3450 E. SUNRISE DRIVE,
SUITE 140
TUCSON, AZ 85718
TEL. 520.882.7623
FAX. 520.882.7643

175 CANAL STREET
MANCHESTER, NH 03101
TEL. 603.668.1400
FAX. 603.668.8567

AMENDMENTS TO THE DRAWINGS:

Figure 1 has been amended to include reference to include the legend "PRIOR ART".

An entire set of replacement drawings is being submitted for the convenience of the Examiner.

HAYES SOLOWAY P.C.
3450 E. SUNRISE DRIVE,
SUITE 140
TUCSON, AZ 85718
TEL. 520.882.7623
FAX. 520.882.7643

175 CANAL STREET
MANCHESTER, NH 03101
TEL. 603.668.1400
FAX. 603.668.8567